Comparisons of Job Characteristics

Focus Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and

Tenders (51-4122)

Associated Occupation: Structural Metal Fabricators and Fitters (51-2041)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 67

Focus Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122) Associated Occupation: Structural Metal Fabricators and Fitters (51-2041)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Design	5.2	10.3	5.4	<<	Extensive education and/or training may be required	
Mechanical	6.8	8.6	12.2	>>	Current knowledge level is likely more than sufficient	
Building and Construction	4.0	6.9	3.0	<<	Extensive education and/or training may be required	
Production and Processing	6.0	6.9	11.6	>>	Current knowledge level is likely more than sufficient	
Engineering and Technology	5.7	6.2	7.6	>	Current knowledge level is likely sufficient	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 83

Focus Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122) Associated Occupation: Structural Metal Fabricators and Fitters (51-2041)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Operation and Control	5.4	5.9	8.6	Skill level is likely more than sufficient
Installation	1.7	2.0	1.8	A higher skill level may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Focus Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122) Associated Occupation: Structural Metal Fabricators and Fitters (51-2041)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Visualization	7.5	10.1	7.7	<<	Extensive improvement in abilities may be required
Trunk Strength	5.7	9.5	7.0	<<	Extensive improvement in abilities may be required
Manual Dexterity	6.5	9.2	9.7	0	Current ability level may be sufficient
Static Strength	5.0	8.3	7.0	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 81

Focus Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122) Associated Occupation: Structural Metal Fabricators and Fitters (51-2041)

Work Activities	Exclusivity of Activity
Examine products or work to verify conformance to specifications	15
Fabricate, assemble, or disassemble manufactured products by hand	11
Lay out machining, welding or precision assembly projects	63
Move or fit heavy objects	8
Operate hoist, winch, or hydraulic boom	34
Read blueprints	10
Read production layouts	66
Read specifications	23
Read technical drawings	7
Read work order, instructions, formulas, or processing charts	9
Recognize characteristics of metals	62
Understand technical operating, service or repair manuals	6
Use acetylene welding/cutting torch	54
Use hand or power tools	2
Use precision measuring tools or equipment	17
Use spot or tack welding techniques	87
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 83

Focus Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122) Associated Occupation: Structural Metal Fabricators and Fitters (51-2041)

Tools and Technologies	Exclusivity
Computers	1
Content authoring and editing software	1
Cutting and crimping and punching tools	3
Data management and query software	1
Forming tools	2
Heating equipment and parts and accessories	19
Holding and clamping tools	3
Holding and positioning and guiding systems and devices	23
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Measuring and layout tools	3
Power tools	2
Rough and finishing tools	5
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O^*NET (Occupation Information Network) data.